

Appendix A

Applicants' Marked-Up Claim Language

6. (Three Times Amended) A method of delivering a receiver specific program at at least one of a plurality of receiver stations, [each of said plurality of receiver stations having a computer and an output device,] comprising the steps of:

[receiving] generating a first control signal at [one or more origination transmitters] a transmitter station;

receiving a second control signal at said [one or more origination transmitters] transmitter station, said second control signal operative to communicate said first control signal [to an intermediate transmitter]; and

transmitting said first control signal to said at least one of said plurality of receiver stations in response to said second control signal, said first control signal effective at said at least one of [a] said plurality of receiver stations to control [said] a computer to compute a receiver specific value by processing information stored in said computer, generate a receiver specific signal based on said receiver specific value, and [communicate a unit of] output programming [to said output device] based on said receiver specific signal.

7. (Three Times Amended) A method of delivering a receiver specific program at at least one of a plurality of receiver stations, [each of said plurality of receiver stations having a computer and an output device,] comprising the steps of:

[receiving and] storing a control signal and selected data at a transmitter station; and

[causing] transmitting a transmission including said stored control signal [to be communicated to a transmitter] and said stored selected data, [at a specific time, thereby to transmit said control signal,] said control signal effective at said at least one of a plurality of receiver stations to control [said] a computer to compute a receiver specific value by processing information stored in said

computer including said selected data, generate a receiver specific signal based on said receiver specific value, and [communicate a unit of] output programming [to said output device] based on said receiver specific signal.

21. (Three Times Amended) The method of claim 6, [wherein said computer is operatively connected to said intermediate transmitter for generating some portion of at least one of a computer program and a data module in response to an instruct signal,] said method further comprising the steps of:

[receiving said] originating an instruct signal at said [one or more origination transmitters] transmitter station; and

[transmitting said instruct signal to said computer] generating some portion of at least one of a computer program and a data module in response to said instruct signal.

22. (Twice Amended) The method of claim 6, wherein said receiver specific program includes a [simultaneous or sequential] presentation of [two or more of units of] at least two instances of combined medium programming, said method further comprising the steps of:

[receiving said at least one of said two or more units of programming and communicating said at least one] transmitting a portion of each of said two [or more units of programming to said one of said one or more origination transmitters and said intermediate transmitter] instances of combined medium programming.

25. (Three Times Amended) A method for controlling the transmission of a control signal from an intermediate transmitter station to a receiver station, [said intermediate transmitter station

having a first computer, one or more receivers and one or more transmitters,] comprising the steps of:

receiving, at [one or more of said receivers of] said intermediate transmitter station, [one or more] information regarding a first control [signals, each of said one or more first control signals received from outside of said intermediate transmitter station] signal;

receiving[, at one or more of said receivers of said intermediate transmitter station, one or more] a second control [signals, each of said second control signals received from outside of said intermediate transmitter station,] signal [wherein said one or more second control signals are] operative to cause [said] a first computer [in] at said intermediate transmitter station to select [a specific first control signal] data and to communicate said [selected] first control signal to [at least one of said transmitters of said intermediate transmitter station] a memory of said computer based on said data; and

transmitting, [from said one or more transmitters of said intermediate transmitter station] to said receiver station, said selected first control signal, said selected first control signal operative at said receiver station to control a second computer to generate a receiver specific value by processing information stored in said second computer, generate a receiver specific signal based on said receiver specific value, and communicate [a unit of] programming to an output device based on said receiver specific signal.

26. (Amended) The method of claim 25, wherein [each of] said [one or more] first control [signals] is [received] generated at said intermediate transmitter station before [each of] said [one or more] second control [signals] signal is received.

27. (Amended) The method of claim 25, wherein [at least one of said one or more] said step of transmitting said first selected control [signals] signal is [received at said intermediate transmitter station after one or more of said second] based on a third control [signals is received] signal.

28. (Twice Amended) The method of claim 25, further comprising the step of storing said selected first control signal at [one or more] a storage [devices] device included within said intermediate transmitter station.

29. (Twice Amended) The method of claim 28, wherein [the time of] said transmitting step is performed at a specific time according to [information included within said one or more second] a third control [signals] signal.

33. (Twice Amended) The method of claim 6, further comprising the [steps] step of[:] receiving operating instructions at said [one or more origination transmitters] transmitter station, said operating instructions effective to control a processor at said transmitter station, [to respond to at least one of] wherein said first control signal and said second control signal are processed by said processor under control of said operating instructions[; and

transmitting said operating instructions to at least one of said intermediate transmitter station and said plurality of receiver stations].

34. (Amended) The method of claim 7, further comprising the [steps of:
receiving] step of transmitting operating instructions [at] to said [one or more transmitter station] computer, said operating instructions effective to control [a processor to respond to said

control signal; and

transmitting said operating instructions to at least one of said plurality of receiver stations] said computer, wherein said control signal is processed by said computer under control of said operating instructions.

35. (Twice Amended) A method of delivering a receiver specific program at a receiver station having a computer and an output device, said method comprising the steps of:

(a) receiving a broadcast or cablecast information transmission comprising a plurality of units of programming and [one or more] a control [signals] signal;

(b) communicating each of said plurality of units of programming to at least one of:

(1) said computer for processing; and

(2) said output device for delivery to a user;

(c) detecting said [one or more] control [signals] signal in said broadcast or cablecast information transmission and passing said detected [one or more] control [signals] signal to said computer;

(d) controlling said computer based on said detected and passed [one or more] control [signals] signal, said step of controlling comprising:

(1) generating a receiver specific value by processing information that is stored in said computer;

(2) selecting at least one of said plurality of units of programming based on said receiver specific computer generated value; and

(3) [communicating] outputting said selected at least one of said plurality of units of programming [to said output device]; and

(e) delivering [at said output device] a [simultaneous or sequential] presentation of two or more units of programming, said two or more units of programming including said selected [and communicated programming] at least one of said plurality of units of programming.

36. (Amended) The method of claim 35 wherein [said receiver specific program includes a print program and] said selected at least one of said plurality of units of programming [includes] is delivered as printed text[, said method further comprising the step of placing said text in a buffer that outputs to said output device].

37. (Amended) The method of claim 35 wherein [said receiver specific program includes a television or radio program and] said selected at least one of said plurality of units [or] of programming includes audio, [said method further comprising the steps of:] and said step of outputting comprises

[clearing an audio RAM that outputs to said output device; and]
placing said audio into said audio RAM.

38. (Amended) The method of claim 35, wherein said selected at least one of said plurality of units of programming includes information to be displayed in video, [said method further comprising the steps of:] and said step of outputting comprises

[clearing a video RAM that outputs to said output device; and]
placing said information to be displayed in video into [said] a video RAM.

55. (Amended) A method of signal processing [signals] at a receiver station having a

computer and an output device to deliver at the output device [a combined or sequential] ~~an~~ output of ~~combined medium programming including a receiver specific datum within~~ a broadcast or cablecast program [and a receiver specific datum], said method comprising the steps of:

(a) receiving an information transmission comprising a broadcast or cablecast program and [at least one] a control signal;

(b) selecting said received broadcast or cablecast program from the information transmission and transferring it to the output device for delivery to the user;

(c) detecting [a specific first] ~~said~~ control signal in the information transmission and passing said detected [specific first] control signal to [the] ~~said~~ computer; and

(d) controlling said computer based on [the specific first] ~~said~~ control signal, said step of controlling comprising:

(1) generating a receiver specific datum by processing first information that is stored in said computer;

(2) placing said receiver specific datum at a specific memory location of the computer;

(3) communicating said receiver specific datum from said specific memory location to said output device; and subsequently

(4) clearing said receiver specific datum from said specific memory location;

whereby [the combined or sequential output] ~~combined medium programming~~ of said received broadcast or cablecast program [and] ~~including~~ said receiver specific datum is delivered [at said output device] in [the] a period of time between said step of placing said ~~receiver specific~~ datum at said ~~specific~~ memory location and said step of clearing said ~~receiver specific~~ datum from said ~~specific~~ memory location.

56. (Amended) The method of claim 55, wherein the step of generating a receiver specific datum by processing information that is stored in the computer is achieved by executing a computer program [stored in the memory of the computer to process said stored first information, said method further comprising the step of:

detecting in said information transmission a second control signal] which is [effective to load the] loaded at said computer [program into the memory of the computer] in response to said control signal.

60. (Amended) The method of claim 55, wherein [at least one of the processing, generating, or outputting of] processor instructions executed by said computer [is controlled by a programmable controller in response to the control signals] to perform said step of controlling are detected in the broadcast or cablecast information transmission.

78. (Amended) A receiver station apparatus for signal processing [signals] to deliver [a combined or sequential output of] combined medium programming including a receiver specific datum within a broadcast or cablecast program [and a receiver specific computer generated datum], comprising:

an output device, said output device for delivering said program [and receiver specific computer generated datum];

a decoder [comprising means] for[:

(1) receiving an information transmission comprising a broadcast or cablecast program and control signals;

(2)] detecting [the presence of the] control signals in [the] an information transmission[; and

(3) passing the detected control signals];

a computer[, said computer being] operatively connected to said output device and said decoder, said computer having a specific memory location [connected to said output device for communicating data stored in said specific memory location to said output device], and [said computer being programmed to perform] for performing the following steps based upon [one or more specific] said control signals [detected and passed from said decoder]:

(1) generating a receiver specific datum by processing information that is stored in said computer;

(2) placing said receiver specific datum in said specific memory location;

(3) communicating said receiver specific datum from said specific memory location to said output device; and subsequently

(4) clearing said receiver specific datum from said specific memory location,

thereby delivering [a combined or sequential output of] combined medium programming including said receiver specific datum during said [received] broadcast or cablecast program [and said receiver specific datum at said output device] in the period of time between [said step of] placing said datum at said memory location and [said step of] clearing said datum from said memory location.

79. (Amended) A method of communicating mass medium program material from a transmitter station to a plurality of receiver stations each of which includes a broadcast or cablecast program receiver, an output device, a control signal detector, a computer, and with each said receiver station adapted to detect the presence of at least one control signal, to generate a receiver specific datum in response to a detected specific control signal, and to deliver at said output device [a

combined or sequential output of] combined medium programming including said receiver specific datum within a broadcast or cablecast program [and the receiver specific datum], said method comprising the steps of:

[(1)] receiving at a transmitter station a program to be transmitted [and delivering the program to a transmitter];

[(2) receiving and] storing at said transmitter station a control signal which at [the] said plurality of receiver [station] stations operates to generate a receiver specific [datum] value and to select audio for output based on said receiver specific value; and

[(3) communicating said control signal to the transmitter] transmitting at a specific time[, thereby to transmit] an information transmission comprising [the] said program and said control signal.

103.(Amended) The method of claim 79, wherein a plurality of signals is received from one or more remote stations at said transmitter station and at least one is stored at said transmitter station which is operative to schedule transmission, said method further comprising the steps of [programming] adapting said transmitter station to store [the] a schedule and causing said transmitter to transmit in accordance with [the] said schedule.

104.(Amended) The method of claim 103, further comprising the step of causing said transmitter station to generate, in accordance with [the] said schedule, at least portions of signals to be transmitted.

105.(Amended) The method of claim 79, further comprising the steps of:

receiving at said transmitter station an information transmission from a remote station[,];
detecting in the information transmission from said remote station an instruct signal; [which is effective at the transmitter station to execute an instruction set, loading and]
executing [an] said instruction set at a transmitter station computer in response to said instruct signal[,]; and [on the basis of said instruction set,]
selecting, based on said instruction set, information to be processed at a receiver station or communicating information to be associated with said program.

109.(Amended) The method of claim 106, further comprising the step of controlling said memory location to communicate said program to said transmitter [in response to] based on a second instruct signal.

111.(Amended) The method of claim 106, further comprising the step of embedding first instruct signal in said program thereby to enable said controller to respond to said embedded said first instruct signal at a time when said program is being communicated.

125.(Amended) A transmitter station apparatus for processing [signals] a signal and communicating mass medium program materials to present at each of a plurality of receiver stations a combined output of a broadcast or cablecast program and a receiver specific computer generated datum, with each of said receiver stations having an output device for receiving and delivering the broadcast or cablecast program and other information, each said station also having a microcomputer with a specific memory location operatively connected to said output device for storing and outputting information to said output device, said transmitter station apparatus comprising:

a broadcast or cablecast transmitter for communicating to a plurality of receiver stations an information transmission;

a program input receiver operatively connected to said transmitter for communicating the program to said transmitter;

a memory or recorder operatively connected to said transmitter for storing and communicating a first control signal which at the receiver station operates to generate the receiver specific datum; and

an input device operatively connected to said memory or recorder for causing said memory or recorder to communicate said first control signal at a specific time to said transmitter, thereby to communicate [said information transmission, said information transmission comprising] said program and said first control [signal,] signal to said receiver stations and cause each of said plurality of receiver stations to deliver said program at its output device, generate a receiver station specific datum, place its receiver station specific datum at its memory location for a period of time, and deliver a combined output of said broadcast or cablecast program and its receiver station specific datum at its output device.

127.(Twice Amended) A method of communicating mass medium program material to a plurality of receiver stations each of which includes a broadcast or cablecast program receiver, an output device, a control signal detector, a computer with a specific memory location capable of communicating to said output device, and with each said receiver station adapted to detect the presence of at least one control signal, to generate a receiver specific datum in response to a detected specific control signal, and to deliver at said output device [a combined or sequential output of] combined medium programming including said receiver specific datum within a broadcast or cablecast program [and the receiver specific datum], said method comprising the steps of:

[(1)] receiving at a transmitter station a program to be transmitted;

[(2)] generating data related to said program;

[receiving] generating at said transmitter station a first control signal using said generated data which at the receiver station operates to generate the receiver specific datum;

[(3)] receiving a second control signal [which operates at said transmitter station to communicate at least one of said program and said first control signal to a transmitter]; and

[(4)] transmitting [an information transmission comprising] at least one of said program and said first control signal in response to said second control signal.

128.(Amended) The method of claim 127, [wherein said second control signal is operative to control an intermediate transmission station to transmit said information transmission to at least one of said plurality of receiver stations,] said method further comprising the step of transmitting said second control signal to said [intermediate] transmitter station.